



# The Army's Chesapeake Review

June/July 2002



## Maryland and Virginia 2002 Legislative Update

By Brian Feeney

The 2002 session of the Maryland and Virginia General Assemblies resulted in good and bad news for the environment and the Chesapeake Bay. Both states face declining revenues and responded by trimming their budgets and avoiding expensive new environmental initiatives. At the same time, both passed legislation and resolutions aimed at finding funding sources for future land preservation and committing themselves to exercising foresight in conservation and water quality matters.

In Maryland, Program Open Space, GreenPrint and the Maryland Agricultural Land Preservation Foundation received a 50-percent funding cut. However, language was included in the budget stating the General Assembly's intention to make this year's lost funding available at a later date, when revenues permit. Maryland also passed the first legislation in 25 years to establish a new funding mechanism for preserving land. It is modeled after New York's legislation for preserving land around the Adirondack lakes that is currently under development pressure.

Virginia's budget cut funding for all agencies and programs by 4 to 5 percent, including funds for natural resource protection. The General Assembly also passed a bond bill to provide \$30 million to add land to the state's Natural Area Preserve System, which seeks out land of special natural resource value, such as the presence of endangered species. Virginia also passed a joint resolution acknowledging its "passive approach to water resource planning" and directing the state water commission to study the state's role in water supply planning, including watershed management.

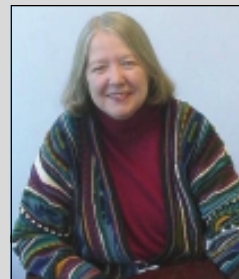
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## Veteran EPA Official Named New Director of Chesapeake Bay Program

When Bill Matuszeski retired after 10 years as director of the Chesapeake Bay Program, everyone knew it would be difficult to replace his sweeping knowledge of the program, his policy-making acumen and his droll wit. In April, Donald Welsh, EPA Region III Administrator, found someone with those qualities: Rebecca Hamner.

Hamner has 38 years of experience working in government, beginning with the U.S. Department of Health, Education and Welfare in 1964. She joined the U.S. Environmental Protection Agency at its inception in 1971. She has held numerous executive positions in Washington and several EPA regions, including acting assistant administrator for water; deputy assistant administrator for water; regional administrator for Region IV in Atlanta; acting regional administrator for Region VIII in Denver; director of the Office of Water Enforcement, Permits and Federal Activities at EPA headquarters and deputy regional administrator for Region I in Boston. She was most recently director of Region III's Water Protection Division.

Hamner is a recipient of the President's Distinguished Federal Executive Award and has twice received the President's Meritorious Federal Executive Award. She is a native of Keysville, Ky., and holds a bachelor's degree in government from the College of William and Mary and a master's degree in political science from American University.



Rebecca Hamner

## Low-Impact Development Workshop Teaches Stormwater Management

Streams running brown after a hard rain—most people accept this as the price of progress as metropolitan areas expand into the countryside. But at a three-day workshop held at Fort Belvoir last April, the U.S. Army Environmental Center (USAEC) showed personnel from federal, state and local agencies around the country that streams can run clear after storms.

USAEC's Low Impact Development (LID) Workshop taught the 73 attendees techniques for mimicking the land's predevelopment hydrologic regime when planning for new development. Attendees also learned how to reduce stormwater impacts by retrofitting already-developed areas.

Historically, stormwater that flows into streams and eventually large bodies of water such as the Chesapeake Bay has contained high levels of sediment from soil erosion, nutrients from animal wastes and fertilizer, and pollutants such as oil and heavy metals from parking lots and industrial sites. The traditional civil engineering approach to stormwater management seeks to move large volumes of water quickly from the built environment to streams, lakes and the ocean. These inflows have steadily reduced water quality and impaired the habitat value of surface waters wherever development occurs.

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## Legislative Update

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### Maryland

**Land Conservation:** The Maryland Local Land Preservation Programs Act encourages local governments to adopt land preservation programs and pledges the state to identify funding sources to provide matching grants to local governments for property acquisitions. To qualify for matching grants, local governments must provide the state with a conservation plan for their jurisdictions. They are also required to establish permanent funding mechanisms. To pool resources and leverage funding, the Maryland Department of Natural Resources (DNR) is directed to assist local governments in developing conservation plans and coordinating individual land acquisitions with federal and state agencies, as well as nonprofit organizations. The DNR and the Maryland Department of the Environment (MDE) are directed to identify federal and other funding sources that will enable the state to establish a permanent funding mechanism for land acquisitions and to report back to the General Assembly.

The Atlantic Coastal Bays Protection Act passed this year after failing in previous sessions. It adds coastal bays to the areas of Maryland subject to the 1986 Critical Areas Agreement. Local governments are required to designate all land within 1,000 feet of the Atlantic Ocean and its tributaries as one of three development intensity categories (intensely developed area, limited development area, or resource conservation area) in a critical areas plan that con-

forms to the 1986 agreement. The county and municipal plans must then be approved by the Chesapeake Bay Commission. The plans have to be updated every four years, and the state reimburses the local government for preparation expenses. Another critical areas act, the Chesapeake Bay Critical Area Protection Program, directs local governments to clarify their local critical areas plans to consider the reasonable use of an entire parcel when an owner requests a variance. The legislation is a response to recent court decisions in cases brought by property rights groups claiming loss of all reasonable use.

**Water Quality:** The Water Quality Improvement Act clarifies the requirements of farmers in completing nutrient management plans. It limits the Maryland Department of Agriculture's inspector to merely confirming compliance with the plan while on a farmer's property and excludes small farms from the requirement. The act also requires farmers who apply chemical fertilizer or sludge to their fields to include nitrogen and phosphorous in their plans. Finally, farmers may be reimbursed for consultants' fees incurred while developing nutrient management plans.

The Reclaimed Water Act directs the MDE to encourage the use of partially treated sewer water on farms, golf courses, athletic fields and other extensive turf areas as a water conservation measure. The act establishes setbacks from potable wells, streams and buildings.

The Wastewater Infrastructure Improvement Study Act directs the MDE to conduct a statewide inflow and infiltration study in 2004 to identify problems at Maryland wastewater

treatment plants. MDE is also directed to contract with the Maryland Environmental Service to perform a detailed inflow and infiltration study in 2005 at selected large, medium and small wastewater treatment plants as case studies. Finally, MDE is directed to finance a utility rate study for each locality to compare the locality's charges for wastewater treatment with the actual cost. As part of the study, MDE will determine if each locality has adequately funded its capital requirements for wastewater treatment.

**Habitat Protection:** Submerged aquatic vegetation (SAV) in the Bay received protection from an act that requires DNR to contract with the Virginia Institute of Marine Science to perform an annual Bay-wide aerial survey of SAV. The survey will be used to designate SAV protection zones, which will be updated every three years. These zones will be marked with buoys, and the use of traditional bottom rakes and shinnecock rakes will be prohibited. Zones will only be removed from protection if they contain no SAV for three years or have an SAV density of less than 10 percent for six years, an indication that the area is no longer suitable for SAV growth.

Another act directs the DNR to require a fisheries management plan for catfish. Two new acts affect oyster populations in the Bay. One establishes fines of up to \$3,000 for poaching in marked oyster sanctuaries. The other requires the DNR to undertake a study to determine if nonnative *Crassostrea ariakensis* can be safely introduced to Maryland waters. The study will also address the current condition and ongoing viability of native oyster species.



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The newsletter is distributed via U.S. mail and e-mail. It can also be viewed on the Army Chesapeake Bay Program Web site. The Web address is <<http://www.hqda.army.mil/acsimweb/env/cbi/index.html>>. If you want to be on the distribution list, contact Brian Feeney of Horne Engineering Services, Inc., by e-mail, <bfeeney@horne.com>, or by telephone, 410-515-5802.

## Virginia

**Land Conservation:** In addition to \$30 million of bond funding for the Virginia Natural Area Preserve System, the General Assembly passed a joint resolution directing the secretary of natural resources to explore the feasibility of establishing a \$5-per-ton tipping fee for solid waste disposal. Forty percent of the revenue raised would be used to buy land for open space conservation.

The General Assembly passed two brownfields initiatives. One requires the Virginia Water Management Board to promulgate regulations that allow owners of contaminated property to undertake voluntary cleanups if a cleanup is not already required by the U.S. Environmental Protection Agency (EPA). The board is to establish site-specific, risk-based remediation standards that minimize cleanup delay and expense by considering the future use of the site. The law provides immunity from future state enforcement actions and amnesty for voluntarily disclosing the existence of a brownfield. Finally, it establishes a fund that provides grants to local governments and loans to corporations for brownfields cleanup.

Another initiative requests the Department of Conservation and Recreation to study the future uses of a U.S. Navy Superfund site on the South Branch of the Elizabeth River, located in the Colonial-era core of Portsmouth. The department is directed to work with the city, EPA, U.S. Navy and Elizabeth River Project to explore open space options such as parklands and wildlife habitat. Another act designates two new areas to be added to Virginia's scenic rivers system, a 9.2-mile stretch of the Guest River and a 6-mile stretch of the Clinch River, both in Wise County.

**Water Quality:** In addition to the joint resolution directing a study of the state's role in water supply planning, the General Assembly passed an act that amends the existing sewage sludge application regulations to require land applicators to obtain a National Pollution Discharge Elimination System Permit. It also directs the Water Quality Management Board to promulgate regulations requiring sludge applied to land

## Maryland Army National Guard Developing Plans to Prevent and Control Spills

One goal of the *Chesapeake 2000 Agreement* is to continually improve pollution prevention measures and strive for zero release of chemical contaminants. The Maryland Army National Guard (MDARNG) is doing just that. With technical assistance from the Baltimore District, Army Corps of Engineers, the MDARNG has recently revised the Spill Prevention, Control and Countermeasure (SPCC) Plans for a number of their armories.

As part of their day-to-day activities, MDARNG armories use petroleum products, such as diesel fuel, motor oil and gasoline. The intent of

the SPCC plans is, first, to prevent spills and, second, should a spill occur, to limit the magnitude and resulting damage to the surrounding environment.

The SPCC plans include recommendations on how to prevent spills, standard operating procedures for using petroleum products and checklists for regular monitoring of the petroleum storage containers. More importantly for the armory personnel, the plans have two short appendices that lead users through the everyday procedures for safely storing and handling petroleum products.

to be treated or stabilized and applied so as to avoid discharge into state waters. The act also enables local governments to require testing and monitoring of sludge to ensure compliance with the regulations and to impose fees to pay for its own testing and monitoring. Another piece of legislation establishes a fund that will provide grants to local governments for closing municipal and abandoned landfills by adding a double synthetic liner and a leachate collection system to protect groundwater from contamination.

Another act empowers state foresters to require owners of forested property to cease any tree harvesting actions likely to cause sediment runoff to state waters. Work can only resume after the owner has implemented satisfactory mitigation measures. Owners must also notify the state forester of tree harvesting activity within three days of beginning work.

**Habitat Protection:** A joint resolution proclaims the General Assembly's support for introducing genetically sterile *Crassostrea ariakensis* into state waters if research currently being conducted by the Virginia Institute of Marine Science and the Chesapeake Bay Foundation finds that the new species will not threaten native oysters. The joint resolution also renews Virginia's commitment to the *Chesapeake 2000 Agreement* goal of a tenfold increase in native

oysters and encourages expanded federal and state cooperation with nonprofit organizations to reach the goal.

**Tree Conservation:** The General Assembly passed legislation that enables local governments to adopt tree replacement ordinances in new subdivisions in areas with a population density of at least 75 people per square mile. The act specifies that, 20 years after planting, the tree canopy should cover 10 percent of the land area in sites zoned business, commercial or industrial and in residential areas zoned for more than 20 units per acre. It requires tree canopy cover of 20 percent for residential sites zoned 10 units or less per acre. Developers have the option of tree canopy banking by planting a required number of trees at an off-site location at the direction of the local government. Preserving existing trees can count as a credit; schools and playing fields are exempted.

**Ballast Water:** Virginia's ballast water regulations were expanded to require ships entering state waters to file a ballast water control form with the Hampton Roads Maritime Association within 72 hours of discharge or, if the ship does not discharge, before departing from Virginia's waters. Ships are exempted if their previous port-of-call was in the United States and a ballast water control form is already on file.

## LID Workshop

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Attendees spent the first day of the workshop learning how to use the land's own ability to retain and gradually release stormwater and to attenuate pollution to reduce stormwater impacts. The classroom sessions presented techniques such as replacing traditionally impermeable surfaces (for example, sidewalks) with permeable aggregate material; using existing low spots to trap and retain stormwater for gradual release; replacing piping and straight, hardscape drainage ditches with gently sloping, grass-lined drainage ditches or swales; and designing sites to maximize open space and reduce impervious surface area. Attendees also learned about the value of replacing traditional, ecologically valueless stormwater ponds with wet-meadow stormwater ponds that provide habitat and retain storm flows, as well as about implementing conservation measures such as restoring or expanding riparian forest buffers to slow stormwater flow and trap nutrients and sediments.

The instructors explained that implementing LID techniques is a practical way to help meet new, stricter urban stormwater management requirements under the Clean Water Act and the Chesapeake Bay Program's agreements affecting federal facilities. The Chesapeake Bay Stormwater Directive issued at the December 2001 Executive Council meeting requires implementing at least 60 innovative stormwater management demonstration projects in targeted areas on federal facilities by 2006 and another 15 on nontargeted public lands by 2008. Implementing LID is also consistent with each of the military services' sustainable design and development policies.

On the second day, each of the attendees participated in field exercises on the second day in which they analyzed LID opportunities for sites planned for new development and, for already-developed sites, LID retrofitting opportunities.

On the third day, workshop participants worked in groups to design and present their own low-impact development project.

## Quality Management Board Meeting

The next Quality Management Board meeting will be held at the Horn Point Laboratory in Cambridge, Md., on Monday, Sept. 9, 2002. All installation, service and U.S. Army Corps of Engineers Chesapeake Bay Program coordinators are encouraged to attend.

After the meeting, attendees can join Patuxent Naval Air Station personnel

to raise blue heron nesting platforms on nearby Bloodsworth Island. The project will take from two to four days. Housing and transportation to the site will be provided.

Volunteers are welcome for as long or as little as their time permits. Bring clothes for the weather, the sand and the black flies. For more information, contact Jim Swift at 301-757-0006.

## Fort Lee and Forts Eustis and Story Win Top Environmental Awards

Two of the U.S. Army's Chesapeake Bay installations—Fort Eustis/Fort Story and Fort Lee—have won top military honors for environmental protection.

Fort Eustis/Fort Story's Environmental and Natural Resources Division, Conservation Branch, won both the 2001 Secretary of the Army's Environmental Award and the 2001 Secretary of Defense Environmental Award for Natural Resource Conservation at a Small Installation. In capturing both awards, the Fort Eustis/Fort Story Conservation Branch won among all small U.S. Army installations worldwide (under 10,000 acres) and all U.S. defense installations. Judges noted the installations' comprehensive natural

resource management program, which has restored and protected the 25 miles of shoreline, 2,400 acres of wetlands and more than 500 acres of contiguous coastal maritime forest that make forts Eustis and Story unique among military installations.

The Environmental Management Office at Fort Lee received the Army's highest recognition for environmental programs: the 2001 Secretary of the Army Environmental Award for Environmental Quality. Fort Lee was acknowledged for its success in training more than 2,500 soldiers and Marines annually in the proper use, storage and transport of petroleum, oil and lubricants.

*Low Impact Development Workshop participants design a stormwater management retrofit for the Fort Belvoir Post Exchange. Attendees include (standing, from left) Glenn Markwith, Department of Defense Chesapeake Bay Program coordinator; Thomas Wray, Naval Surface Warfare coordinator; and Jennifer Guerrero, Fort Monroe coordinator; (seated, from left) Helene Merkel, Horne Engineering Services; Joan Pamperien, U.S. Army Corps of Engineers, Baltimore District; and Andrea Cabral, Vermont Agency of Transportation.*

